Electron Scattering by Waves

- Electron precipitation is caused by W-P interactions with trapped electrons.
- Voluminous theoretical and experimental research supports this contention.
- The applicable experimental data are mostly long-term decay rates of trapped electrons.

Exceptions:

- 1. Lightning induced precipitation
- 2. Precipitation correlated with chorus bursts
- 3. Low altitude bounce and drift loss cone fluxes
- 4. High angular resolution pitch angle distributions showing electrons inside the loss cone.
- Closure of W-P experiments not yet satisfactory.
- SEPS can address this issue by measuring instantaneous bounce-averaged diffusion rates and comparing these rates with wave intensities.